

AMENDMENTS TO THE SPECIFICATION

Please correct the title on page 1 as follows:

INFRARED FRIEND OR FOE IDENTIFICATION ~~IDENTIFICATION~~ SYSTEM

Please add the following sentence before line 5 of page 1:

This is a continuation of Application No. 07/068,501, filed July 1, 1987, entitled "Infrared Friend or Foe Identification System."

Please amend the paragraph that begins at page 1, line 10, to read as follows:

Friend or foe identification systems used by military aircraft are generally radar-based systems, which operate in the microwave portion of the electro-magnetic spectrum. Because the basic radar return from an aircraft is highly diffracted, the basic return cannot be used to positively identify the shape and, therefore, the type of aircraft. However, other portions of the radar return can be used to identify the type of aircraft. For example, a jet engine modulation (JEM) system analyzes the doppler shift of the radar return to determine the number and rotational velocities of the turbine blades in an aircraft's jet engine. From this, the type of jet engine can be identified and, once the jet engine has been identified, it is usually a simple matter to identify the type of aircraft. However, this radar system is not reliable as ~~can easily be jammed by the enemy~~ may be operating the same type of aircraft.

Please replace the two paragraphs at page 4, lines 25-30, with the following:

Figure 4 is a schematic illustration of an infrared detector for detecting the spectrally-discrete thermal emissions of the seed formulation introduced into the exhaust plume; and

Figure 5 is a schematic illustration of an interrogation ~~circuit~~ circuit;

Figure 6 is a fragmentary, exploded view of the jet fighter aircraft showing a seed introduction system for introducing a seed formulation into the fuel of the aircraft; and

Figure 7 is a fragmentary, exploded view of the jet fighter aircraft showing a seed introduction system for introducing a seed formulation into a combustor of the aircraft's jet engine.

Please amend the paragraph on page 6, lines 15-29, as follows:

Although the seed formulation is shown being injected directly into the exhaust plume 12 of the aircraft 10, the seed formulation can also be injected into the fuel 26 before being burned or injected into a the combustor 28 of the aircraft's jet engine, as shown in Figures 6 and 7, respectively. Furthermore, instead of the seed formulation being changed by replacing the formulation in the pressurized tank 16, several tanks 16 can be located on board the aircraft 10 and the particular seed formulation of the day selected by a switch. Finally, if the seed formulation is injected into the exhaust plume 12 continuously, rather than upon interrogation by a friendly source, the interrogation signal is eliminated, resulting in a completely jam proof identification system.